

REMARKS/ARGUMENTS

Claims 22-32 are pending. New dependent claims 31 and 32 have been added. No new matter has been introduced. Applicants believe the claims comply with 35 U.S.C. § 112.

Applicants would like to thank Examiner Matthew Bradley and Supervisory Patent Examiner Donald Sparks for the courteous interview extended to Applicants' counsel, Chun-Pok Leung, and Applicants' representative, Hiroshi Kawano, on October 20, 2005. During the interview, the differences between claim 22 and the cited art were discussed.

Claims 22-30 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Matoba (US 5,611,069).

Applicants respectfully submit that independent claim 22 is novel and patentable over Matoba because, for instance, Matoba does not teach or suggest that, after starting to mirror data between the one of the first type disks and the at least one second type disk, the control section is configured to stop mirroring data between the one of the first type disks and the at least one second type disk and start to mirror data between another one of the first type disks and the at least one second type disk, according to the error status of the one of the first type disks and the another one of the first type disks. The at least one second type disk is used as a spare disk for storing copy data of data stored in one of the first type disks. The invention as claimed is directed to the dynamic switching of the first type disks (data to be mirrored to the at least one second type disk) according to the error status of the first type disks. Before the switch, the system starts mirroring data between one first type disk and the at least one second type disk. After the switch, the mirroring is stopped and the system starts mirroring data between another first type disk and the at least one second type disk. The switching is based on the error status of the first type disks.

In contrast, Matoba discloses switching between the present use disk (analogous to first type disk) and the spare disk (analogous to second type disk), not switching between first type disks (i.e., not switching between present use disks). In the summary of the invention at page 4, line 66 to page 5, line 6, Matoba discloses: "Due to this, the allocation to disk for present use and the spare disk can be switched before a fault occurs.

Therefore, even in the case where disk for present use actually causes a fault, since the allocation to the spare disk has already been switched, the spare disk unit fails and the apparatus can cope with a fault without particularly substantially interrupting the processes for the read access." In the detailed description of the preferred embodiments, Matoba more clearly discloses that the switching is between the present use disk and the spare disk, not between present use disks. For example, at first "the disk control section 40-1 side has been allocated to the present use disk and the disk control section 40-2 side has been allocated to the spare disk" (col. 8, lines 50-53). "When the fault flag is set, if the fault flag has been set to the present use disk unit in the next step S13, the present use flag which was allocated in the initializing process in step S1 is alternated to the spare flag." Column 12, lines 50-53. "Referring again to FIG. 9, when the alternation from the present use disk to the spare disk is finished in step S13, the occurrence of fault is notified to the host computer 10 in step S14, thereby promoting the operator or maintenance person to repair or exchange the disk unit in which the occurrence of the fault was decided." Column 13, lines 15-20. "In this case, if there is a fault of the present use disk unit, the alternation of the allocation to the spare disk is executed." Column 13, lines 27-29. Therefore, Matoba discloses switching the present use disk and the spare disk, not switching two present use disks.

For at least the foregoing reasons, claim 22 and claims 23-32 depending therefrom are novel and patentable over Matoba.

CONCLUSION

In view of the foregoing, Applicants believe all claims now pending in this Application are in condition for allowance. The issuance of a formal Notice of Allowance at an early date is respectfully requested.

If the Examiner believes a telephone conference would expedite prosecution of this application, please telephone the undersigned at 650-326-2400.

Respectfully submitted,



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